UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,435	10/18/2000	Herbert Heiss	P00,1528	8860

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EXAMINER
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ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 September 2005</u>.

2a)☒ This action is **FINAL.** 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>18-35</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>18-24,26-29,31,32 and 35</u> is/are rejected.

7)☒ Claim(s) <u>25 and 30-34</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 June 2005</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Applicant amendment, filed 06/30/05 has been entered. Claims 18-35 remain pending.

Drawings

1.   The drawings were received on 6/30/05. These drawings are not approved.

2.   The amendment filed 06/30/05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the replacement drawings Fig. 1 and 2 are not supported by the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

Specification

3.   The disclosure is objected to because of the following informalities: the amendment to the specification, pages 3-5, filed 6/30/05 does not properly indicate the replacement paragraphs. For example, page 7, line 25 of the specification, filed as a substitute specification on 05/18/04, does not contain any references to Figure 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   Claims 18-24, 26-29, 31, 32 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Nattkemper (US 6,754,206).

5.   Regarding claims 18 and 35, Nattkemper teaches a method of removal of ATM cells

from an ATM communication device (switching subsystem 100 communicating with ATM

switch 12 on Fig. 1 and 3:55-60 discarding selective ATM cells 4:20-25), comprising:

Providing a plurality of ATM cells, a plurality in each case assigned to a common frame

(part of PPD process 15:1-7, as PPD discards cells from a common frame) and which are stored

in connection-specific queues (streams classified into different queues 14:40-54),

Providing a first algorithm, which removes, with exception of the first and last ATM cell

in a frame, all newly arriving cells in the frame (implementing partial packet discard process

PPD 15:1-30, wherein all frame subsequent cells are dropped with exception of the first and the

last ATM cells),

Providing a second algorithm, which removes all from a first cell to the last cell, upon

their arrival in a queue from ATM communication device (implementing early packet discard

process EPD 15:1-30, wherein all frame cells are dropped),

At a start of a transmission process, indicating by a user a maximum number of ATM

cells per frame and transmitting the ATM calls using said maximum number (switching system

100 utilizes certain thresholds to indicate congestion 14:15-53 and inherently indicates the

maximum number of ATM cells per frame at the start of the transmission, because the PPD

process discarding the remaining cells of the frame with a lost cell knows the maximum number

of cells in the frame), and

when said maximum number is exceeded, discarding the associated frame or using the

first algorithm (during congestion certain cells are discarded using early or partial discard

techniques 15:1-15).

6.   Regarding claim 19, Nattkemper teaches controlling a length of the queue on a

connection specific basis (defining buffer capacity on a type of a stream 17:55-67 and 18:1-17).

7.   Regarding claim 20, Nattkemper teaches using a constant value per connection, which is

a measure of a maximum frame size of the connection (using a single fixed size buffer during

system run-time 27:30-37).

8.   Regarding claim 21, Nattkemper teaches storing per connection, a number of the cells

which arrived for said connection since an end of the last frame for said connection (In absence

of congestion, when no levels of table 10:30-53 are triggered, all ingress cells are enqueued to

their respective queues 10:54-67 and 12:1-15).

9.   Regarding claim 22, Nattkemper teaches storing no high-priority cells for a connection if

a length of the queue for said connection is equal to a value which is independent of said

connection and which represents a measure for a fixed upper limit for the queue (discarding the

cells coming into the queue, when the queue reaches it occupancy limit 49:15-50).

10.   Regarding claim 23, Nattkemper teaches if high priority frames do not exceed the

maximum number of cells per frame, the first algorithm is not used for the frame (if higher

priority traffic classes remain within the limit, packet discard would not be used 15:1-20).

11.   Regarding claim 24, Nattkemper teaches a specific portion of the buffer store is reserved

for high priority cells per connection and low priority cells are not given any access to said

specific portion of the store (certain buffers are reserved for high priority streams only, CBR and

VBR 21:1-30).

12.   Regarding claims 26 and 27, Nattkemper teaches completely discarding high priority

frames if, on arrival of a first cell of a connection, or on arrival of a cell which is neither first or

last cell in a frame, less than maximum number of cells per frame MFS remains in a logic queue

for this connection, or the logic queue exceeds a threshold and a status of a buffer store indicates

that high priority frames should be discarded, where MFS stands for maximum frame size (when

the queue reaches it occupancy limit, the cells coming into the queue are discarded, 49:15-50)

13.   Regarding claim 28, Nattkemper teaches completely discarding low priority frames on

arrival of a first cell of the connection, a length of the queue for this connection is greater than a

variable S PPD-I the length of the queue is longer than a value S EPD-I and a status buffer store

indicates that low priority frames should be discarded (all cells going to the low priority queue

are discarded when it is considered to be in the L3 congestion mode, when the length of the

queue exceeds a threshold 10:30-54 and 12:1-15).

14.   Regarding claim 29, Nattkemper teaches discarding some low priority frames for a

connection on arrival of a cell which is neither a first nor a last cell in a frame, a length of the

queue for said connection is greater than variable S-PPD-I-1 or the length of a queue is greater

than a variable S-PPD-I and a status of the buffer store indicates that low priority cells should be

discarded or if the frame is longer than the maximum number of cells for the frame size(all cells

going to the low priority queues are discarded at the L3 congestion mode, when the length of the

queue exceeds a threshold, 10:30-54 and 12:1-15).

15.   Regarding claims 31 and 32, Nattkemper teaches when filling level of a buffer store is

low, high priority frames and low priority frames whose first cell has been transferred and whose

frame length does not exceed the maximum number of cells per frame are not subject to the first

algorithm (when no levels are triggered, then all ingress cells are enqueued to the buffer

attachments, 10:54-67 and 12:1-15).

Allowable Subject Matter

16.   Claims 25, 30, 33 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

17.   Applicant's arguments filed 11/12/04 have been fully considered but they are not persuasive.

On page 7 of the Response, Applicant argues that Nattkemper does not teach that the user indicates at a start of the transmission process the maximum number of ATM cells per frame. Examiner respectfully disagrees.

Nattkemper teaches using a partial packet discard process (PPD on 15:1-30), the process that discards all the cells from a frame with a defective cell, except of a first and a last ATM cell in a frame. Therefore, to identify the last cell in the frame, the system should know the maximum number of the cells in the frame, as the cell of the frame with a maximum number will be the last cell in the frame.

Conclusion

18.   This is a continuation of applicant's earlier Application No. 09/673,435. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the

earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dmitry Levitan
Patent Examiner.
10/17/05

JOHN PEZZLO
PRIMARY EXAMINER